



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

53377

7590

01/11/2010

HOPE BALDAUFF HARTMAN, LLC  
Michael J. Baldauff, Jr.  
1720 PEACHTREE STREET, N.W.  
SUITE 1010  
ATLANTA, GA 30309

EXAMINER

REZA, MOHAMMAD W

ART UNIT

PAPER NUMBER

2436

DATE MAILED: 01/11/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,981	09/12/2003	Kevin Moore	60046.D052US01	6124

TITLE OF INVENTION: METHOD AND SYSTEM FOR SECURING THE CONTENTS OF DATA STORAGE DEVICES WITHIN A COMPUTER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$0	\$0	\$755	04/12/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** **Mail** **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax** **(571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

53377 7590 01/11/2010  
**HOPE BALDAUFF HARTMAN, LLC**  
**Michael J. Baldauff, Jr.**  
**1720 PEACHTREE STREET, N.W.**  
**SUITE 1010**  
**ATLANTA, GA 30309**

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/660,981 09/12/2003 Kevin Moore 60046.0052U\$01 6124

**TITLE OF INVENTION: METHOD AND SYSTEM FOR SECURING THE CONTENTS OF DATA STORAGE DEVICES WITHIN A COMPUTER**

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$0	\$0	\$755	04/12/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
REZA, MOHAMMAD W	2436	713-161000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_  
Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,981	09/12/2003	Kevin Moore	60046.0052US01	6124
53377	7590	01/11/2010	EXAMINER	
HOPE BALDAUFF HARTMAN, LLC Michael J. Baldauff, Jr. 1720 PEACHTREE STREET, N.W SUITE 1010 ATLANTA, GA 30309			REZA, MOHAMMAD W	
			ART UNIT	PAPER NUMBER
			2436	
DATE MAILED: 01/11/2010				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 748 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 748 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability****Application No.**

10/660,981

**Applicant(s)**

MOORE, KEVIN

**Examiner**

MOHAMMAD W. REZA

**Art Unit**

2436

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/05/2009.
2. ☒ The allowed claim(s) is/are 1-5, 7, 9, 11-13, and 15; renumbered as 1-11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Mohammad W Reza/  
Examiner, Art Unit 2436

### DETAILED ACTION

1. This office correspondence is response to the applicant's after response filed on 10/05/2009.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Applicant's representative, Michael J. Baldauff, Jr. (Reg. No. 57,998), and examiner arranged a telephone interview on December 11, 2009 and the interview agenda was to reach an agreement of allowance of claims with examiner amendment would make to these claims as follows:

In the claims:

Claims have been rewritten as follows:

1. (Currently Amended) A method for securing contents of one or more data storage devices within a computer capable of storing a security password for unlocking and locking the data storage devices and of supporting one or more security features, the method comprising:  
reading from each of the data storage devices within the computer a data storage device identifier, the data storage device identifier indicating whether the data storage device supports the security features and whether the data storage device is locked or unlocked;  
determining from the data storage device identifier whether the data storage device supports the security features and is locked;  
in response to determining that the data storage device supports the security features and is locked, determining whether the data storage device is returning from a powered off state, [[or]] a hardware reset, or a sleep state;

in response to the data storage device being locked and returning from a powered off state or a hardware reset, determining whether a backup password may be used to unlock the data storage device;

in response to determining that a backup password may be used, determining whether a request to enter a backup password has been received;

in response to receiving a request to enter a backup password, receiving from a user the backup password for unlocking the data storage device and unlocking the data storage device, allowing access to data stored on the data storage device;

in response to determining that the data storage device is locked and returning from a powered off state or a hardware reset and that the backup password may not be used or a request to enter the backup password has not been received, receiving from [[a]] the user a password for unlocking the data storage device;

in response to receiving the password, determining whether the received password is the security password; [[and]]

in response to the received password being the security password, unlocking the data storage device and thereby allowing access to data stored on the data storage device;[[.]]

in response to determining that the data storage device is locked and returning from a sleep state, determining whether the data storage device was unlocked prior to the sleep state; and

in response to determining that the data storage device was unlocked prior to the sleep state, retrieving the security password from the memory and utilizing the security password to unlock the data storage device.

2. (Previously Presented) The method of claim 1, wherein the method is implemented during a power on test procedure of the computer hosting the data storage devices.

3. (Previously Presented) The method of claim 1, further comprising:  
in response to the received password not being the security password, determining whether limited access should be provided to each locked data storage device;

in response to determining that limited access should be provided, setting a bit corresponding to each locked data storage device to exclude the locked data storage device from detection verification during a power on test procedure; and

in response to determining that limited access should not be provided to each locked data storage device, isolating each locked data storage device from the operating system.

4. (Original) The method of claim 3, wherein limited access comprises prohibiting reading from or writing to the locked data storage device.

5. (Original) The method of claim 1, wherein the data storage devices are locked upon experiencing a powered off state, a sleep state, or a hardware reset, and wherein the method further comprises:

in response to the received password being the security password, determining whether a data storage device returning from a sleep state should be unlocked without requiring a user to enter a password; and

in response to determining that the data storage device should be unlocked without requiring a user to enter a password, storing the security password within a memory located outside the data storage device.

6. (Canceled)

7. (Currently Amended) The method of claim [[6]] 1, wherein the security password is stored within the memory in an encrypted format.

8. (Canceled)

9. (Original) The method of claim 1, further comprising:

in response to determining that the data storage device is unlocked, determining whether a security password has been enabled; and

in response to determining that the data storage device is unlocked and that no security password is enabled for the data storage device, disabling, until a next power cycle, the security features that enable security passwords.

10. (Canceled)

11. (Currently Amended) The method of claim [[10]] 1, further comprising:

in response to the received password being the backup password, determining whether a maximum security is supported by the security features; and

in response to the received password being the backup password and the maximum security being supported, erasing the data storage device before unlocking the data storage device.

12. (Original) The method of claim 1, wherein a password entry attempt counter is set for a maximum number of entry attempts allowed, further comprising:

in response to determining that the password is not the security password, determining whether the password entry attempt counter is equal to zero;

in response to the password entry attempt counter being greater than zero, decrementing the password entry attempt counter by one and again receiving a password from a user; and

in response to the password entry attempt counter equaling zero, prohibiting additional password entries until a next power cycle and displaying a message that the data storage device remains locked.

13. (Original) The method of claim 1, further comprising executing a setup utility within the basic input/output system operative to control one or more functions for manipulating at least one of a security password and a backup password for a data storage device supporting the security features wherein the functions are accessed by one of entering the security password when prompted by the setup utility and selecting the data storage device in the setup utility when said data storage device is unlocked.



14. (Canceled)

15. (Currently Amended) A computer storage medium comprising computer executable instructions which, when executed by a computer, cause the computer to: ~~perform the method of Claim 1:~~

read from each of the data storage devices within the computer a data storage device identifier, the data storage device identifier indicating whether the data storage device supports the security features and whether the data storage device is locked or unlocked;

determine from the data storage device identifier whether the data storage device supports the security features and is locked;

in response to determining that the data storage device supports the security features and is locked, determine whether the data storage device is returning from a powered off state, a hardware reset, or a sleep state;

in response to the data storage device being locked and returning from a powered off state or a hardware reset, determine whether a backup password may be used to unlock the data storage device;

in response to determining that a backup password may be used, determine whether a request to enter a backup password has been received;

in response to receiving a request to enter a backup password, receive from a user the backup password for unlocking the data storage device and unlock the data storage device, allowing access to data stored on the data storage device;

in response to determining that the data storage device is locked and returning from a powered off state or a hardware reset and that the backup password may not be used or a request to enter the backup password has not been received, receive from the user a password for unlocking the data storage device;

in response to receiving the password, determine whether the received password is the security password;

in response to the received password being the security password, unlock the data storage device allow access to data stored on the data storage device;

in response to determining that the data storage device is locked and returning from a sleep state, determine whether the data storage device was unlocked prior to the sleep state; and  
in response to determining that the data storage device was unlocked prior to the sleep state, retrieve the security password from the memory and utilize the security password to unlock the data storage device.

16. – 21. (Canceled)

### **Allowable Subject Matter**

2. Claims 1-5, 7, 9, 11-13, and 15 are allowed. The following is an examiner's statement of reasons for allowance: In interpreting the claims, in light of the Specification and the examiner's amendments, the Examiner finds the claimed invention to be patentably distinct from the prior art of record.
3. Schwartz et al (US patent 7,100,036) is concerned reading from each of the data storage devices within the computer a data storage device identifier, the data storage device identifier indicating whether the data storage device supports the security features and whether the data storage device is locked or unlocked; determining from the data storage device identifier whether the data storage device supports the security features and is locked; in response to determining that the data storage device supports the security features and is locked, determining whether the data storage device is returning from a powered off state, [[or]] a hardware reset.
4. Morisawa et al (US patent 5,537,544) is concerned disclosing that in response to determining that the data storage device is locked and returning from a powered off state or a hardware reset and that the backup password may not be used or a request

to enter the backup password has not been received, receiving from [[a]] the user a password for unlocking the data storage device; in response to receiving the password, determining whether the received password is the security password.

5. However the totality of each element and/or step in claims 1-5, 7, 9, 11-13, and 15 are not alluded to in the combined art of Schwartz and Morisawa. Their teachings either individually or in combination failed to teach or suggest the method recited in claim 1. More specifically, the combination of Schwartz and Morisawa does not teach or suggest "in response to the data storage device being locked and returning from a powered off state or a hardware reset, determining whether a backup password may be used to unlock the data storage device; in response to determining that a backup password may be used, determining whether a request to enter a backup password has been received; in response to receiving a request to enter a backup password, receiving from a user the backup password for unlocking the data storage device and unlocking the data storage device, allowing access to data stored on the data storage device" as recited in claim 1. Similarly, the combination of Schwartz and Morisawa does not teach or suggest "in response to determining that the data storage device is locked and returning from a sleep state, determining whether the data storage device was unlocked prior to the sleep state; and in response to determining that the data storage device was unlocked prior to the sleep state, retrieving the security password from the memory and utilizing the security password to unlock the data storage device" as recited in claim 1. Accordingly, claim 1, is allowable over the combination of Schwartz and Morisawa. So, Claims 1-5, 7, 9, 11-13, and 15 are allowable by virtue of their dependency upon

independent claim and also due to additional limitations recited in these claims. Therefore, for the foregoing reasons, examiner withdraws of the rejection of claims 1-5, 7, 9, 11-13, and 15 under 35 USC §103(a) as being obvious over Schwartz in view of Morisawa.

7. However, the prior art of record fails to teach or suggest some of the steps of the present claim invention. Examiner performed an updated search and unable to find any prior art to disclose all the steps mentioned in the independent claims.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

9. Claims 1-5, 7, 9, 11-13, and 15 are patentable.

10. Claims 6, 8, 10, 14, and 16-21 are cancelled.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad w. Reza whose telephone number is 571-272-6590. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MOAZZAMI NASSER G can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Nasser Moazzami/

Supervisory Patent Examiner, Art Unit 2436

/Mohammad W Reza/

Examiner, Art Unit 2436